State CIO's Report to the Technology Services Board J. Clark Kelso State Chief Information Officer January 16, 2007

As we begin 2007, a brief overview of the major components of the State's IT program – in the nature of an "annual report" – seemed appropriate. The IT program consists of the following broad elements:

- Governance
- Enterprise Initiatives
 - The State Portal and Web Refresh
 - Reforming the State's Business Management Systems
 - Consolidation of Information Technology Infrastructure
 - The Strategic Sourcing Initiative
 - The Statewide Enterprise Architecture Program
 - The Information Technology Workforce Improvement Program
 - Telecommunications and Network Refresh
- Information Security and Privacy
- Information Technology Procurement
- Information Technology Projects

A. Governance

The vision, direction and management of the Executive Branch's IT program are a collaborative exercise, involving many layers of decision-making across the entire Executive Branch. The State Chief Information Officer ("State CIO") provides overall leadership of the State's IT program by organizing and coordinating the collaborative decision-making authority of all of the key stakeholders in support of a common vision of better public access to government and improved internal government operations.

The key organizational components of our IT governance are the Information Technology Council (which represents the views of IT leaders across the Executive Branch), the Technology Services Board (which governs the Department of Technology Services, the primary central provider of IT services to departments and agencies), and the Enterprise Leadership Council (which represents the top executives across the Executive Branch and is responsible for providing business-side guidance to our most important enterprise initiatives). These three governance bodies help to ensure that our IT program stays aligned with our business operations and needs.

The State CIO and the IT Council have established a robust strategic planning process. First published in 2004, the *California State Information Technology Strategic Plan* is now in its third edition, having just been updated in November 2006. Our six strategic goals are as follows:

- 1. Make government services more accessible.
- 2. Implement common business applications and systems to improve efficiency and cost-effectiveness.
- 3. Ensure State information assets are secured and privacy protected.
- 4. Lower costs and improve the security, reliability and performance of the State's IT infrastructure.
- 5. Strengthen our technology workforce.
- 6. Establish a technology governance structure.

B. Enterprise Initiatives

The State Portal and Web Refresh

Improving access to government services and information is the number one goal of our *California State Information Technology Strategic Plan*, and the Internet is one of the key channels for improving that access. With extraordinary assistance provided by the California Research Bureau and the State Library, we now have a solid set of policies and principles upon which to build a substantially improved State web presence. We have settled upon an improved web architecture that separates content from presentation (an important improvement that positions us to take advantage of the next generation of Internet browsers and mobile devices), accessibility standards, and a new enterprise search engine provided by Google.

In addition to making our web sites more usable, we are asking departments to examine all of their customer-service interactions and transactions, and to determine which of those can be offered online, recognizing that most of our customers would rather be "online" instead of "in line." Our strategic plan calls for a statewide refresh of all agency web sites by November of 2007. Information about our new web policies and plans is available at www.eservices.ca.gov.

Reforming the State's Business Management Systems

The Executive Branch's business information systems are woefully inadequate for modern governance. We have scattered, duplicative, conflicting and outdated business applications and systems. After several years of intense study and collaborative deliberation, the project partners – Department of Finance, State Controller, State Treasurer and Department of General Services – have decided that the best course for California state government is to replace these antiquated systems with a modern, enterprise-wide system that will be phased in over a ten year period. Upon full implementation, this enterprise-wide system, known as the "Financial Information Systems for California (Fi\$Cal) Project," will become the mandatory standard for all agencies for performing basic business functions such as budgeting, accounting, procurement, cash management, financial management, financial reporting, cost accounting, asset management, project accounting, grant management and human resources management.

Consolidation of Information Technology Infrastructure

On May 14, 2003, the State CIO called for consolidation of the Executive Branch's two general purpose data centers (i.e., the Stephen P. Teale Data Center and the Health and Human Services Data Center) and for subsequent aggregation of servers and related technologies within the consolidated data center. See J. Clark Kelso, Re-Alignment of Responsibility for the Management of the State's IT Resources and Infrastructure (May 14, 2003) (available on www.cio.ca.gov). After substantial work by a team appointed by the State CIO, and further analysis by the California Performance Review, the consolidation was accomplished pursuant to the Governor's Reorganization Plan to Create a Department of Technology Services (March 31, 2005). In addition to consolidating the State's two general-purpose data centers, the reorganization transferred authority over the State's major telecommunications contract (Calnet) from the Department of General Services to the Department of Technology Services in recognition of the convergence of voice, data and video telecommunications and network technologies.

The reorganization formally occurred on July 9, 2005. The first phase of the reorganization — which involved realignment and integration of the three organizations, completion of a common strategic plan for DTS, creation of a common help desk function, creation of a high-speed data link between the two data center campuses, and adoption of single integrated business systems — was completed on June 30, 2006. At its June 28, 2006, meeting, the Technology Services Board approved a \$16.3 million decrease in DTS rates (in the context of a \$237 million annual budget), which reflects substantial savings from consolidation and consolidation-related activities during the year.

The Strategic Sourcing Initiative

Under the strategic sourcing initiative, multiple contracts for the same goods or services, purchased by multiple State agencies, have been combined to leverage the State's buying power. In the field of information technology the Department of General Services' strategic sourcing team focused on savings in the following areas:

- IT Hardware/PC Goods (desktop and workstations; printers; PC servers; peripherals and laptops).
- IT Hardware/Enterprise Hardware (enterprise servers and storage systems).

To date, we estimate \$105 million in state spending for IT items under the strategic sourcing program, with an estimated savings against historical cost of just over 40%, for a total estimated cost avoidance of \$43 million. Over the life of the strategically sourced IT contracts, DGS estimates total savings of \$103 million.

• The Statewide Enterprise Architecture Program

Established by the State CIO in 2005, the California Enterprise Architecture Program ("CEAP") is charged with developing a comprehensive "Enterprise Architecture" for the Executive Branch's IT program. An enterprise architecture helps coordinate the design and implementation of individual projects so that they interoperate and link together in value-producing ways. CEAP has released on the State CIO's website a series of Enterprise Architecture publications, including a series of papers on "Service Oriented Architecture" that provide the key information needed to design and build shared services in a federated web environment. A Service Oriented Architecture, which supports the ability to "share services" between departments and projects, is a key component of our strategy for cost-effective implementation of the State's new web pages and new back office systems.

The Information Technology Workforce Improvement Program

The State employs over 7,000 employees in IT job classifications. In the next five years, over 50 percent of the State's total workforce of over 200,000 employees will be over 50 years old and eligible to retire. How we manage this changing of the guard in our IT workforce will determine, to a large extent, the success of our enterprise initiatives and major departmental IT projects.

The State has an antiquated and hopelessly inadequate classification and testing system that makes it difficult to recruit and hire IT workers. New statutory authority to conduct skills-based testing (see Government Code § 18900.6), combined with a new IT classification plan that we have agreed upon, will result in an improved capacity to hire the right talent for the job.

We have established a leadership training program offered by Sacramento State University, "Leadership for the Government Executive Program," which is specifically designed to help us build both IT and business-side executive leadership in state government.

Telecommunications and Network Refresh

The Department of Technology Services, Statewide Telecommunications and Network Division ("STND") provides oversight and assistance to State and local government agencies through competitively-bid master telecommunications and consultant contracts, and by providing proactive customer services and information. The next generation of these contracts will provide for legacy and emerging telecommunications and network technologies through the "CALNET II" procurement. The RFP for CALNET II is divided into four Modules that will become individual contracts: 1) Traditional Voice and Data Services; 2) Long Distance Services for Voice; 3) Internet Protocol (IP) Services; and 4) Broadband Fixed Wireless Access Services.

A telecommunications and networking strategic planning effort is underway which we hope will help departments make the most effective use of technologies that are now available in the marketplace, many of which will become available through CALNET II when those contracts are awarded. In addition, pursuant to Governor Schwarzenegger's Executive Order S-21-06, we are taking action to reduce barriers to broadband access and adoption, and adopting measures to ensure that State policies evolve in response to ever-changing conditions in the technology marketplace.

C. Information Security and Privacy

The fundamental mission of our enterprise level security program, the leadership for which is housed in the Department of Finance's Office of Technology Review, Oversight and Security, is to guide the management of security and operational recovery risk for the State's information assets by providing statewide direction and leadership. During 2006, the State Information Security Office ("ISO") within Finance, working collaboratively with the California Office of Privacy Protection and the IT Council's Security Committee, has substantially stepped up its activities to educate and engage departments in improving security processes, both through frequent meetings and a series of publications.

We continued to experience during 2006 a rather regular pattern of minor security incidents, most of which have involved stolen or lost computers. Of the 209 security incidents reported to the State ISO, 22 involved the potential loss of personal identifying information requiring notifications to possibly affected persons. Of those 22 incidents, only 2 involved a large number of records – one involving information that was mailed to the wrong addressees (57,000 records), and the other involving loss of a laptop containing State employee health plan information (80,000 records).

D. Information Technology Procurement

During fiscal year 2005-2006, California agencies entered into over 9,100 IT contracts with a value of \$1.8 billion. Of this total, \$484 million (27%) was for IT Services, \$1.07 billion (58%) was for IT Consulting Services and \$268 million (15%) was for IT Goods.

In FY 05-06, the top ten departments purchased \$1.553 billion in IT contracts, representing 85% of the total value for IT contracts. The most consistent purchasers – the agencies that have made the top ten for each of the last three years – are as follows:

- Department of Technology Services (and its predecessors, the Teale Data Center and the Health and Human Services Data Center);
- Department of Justice (which maintains its own data center and statewide networks for law enforcement);
- Department of Motor Vehicles;

- Department of General Services; and,
- Department of Transportation.

E. Information Technology Projects

The Department of Finance currently tracks 117 active IT projects with total planned project costs estimated at just over \$5 billion. The average project cost is \$43 million, but the median project cost is only \$7.4 million, which reflects a handful of very large projects within a total mix of much smaller projects. In fact, the top 10 projects by cost account for 78% (\$3.9 billion) of the total planned cost of all reported projects tracked by the Department of Finance. The top ten projects fall roughly into three categories: (1) development projects involving the State with all local jurisdictions statewide (e.g., Child Support, Child Welfare System / Case Management System, and VoteCal); (2) development projects involving coordination across a large number of agencies within State government (e.g., Fi\$Cal, 21st Century Project, and HIPAA Implementation); and (3) large department projects that completely refresh foundational departmental systems (e.g., DMV's IT Modernization, CDCR's BIS, and EDD's ACES).